(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 17 June 2004 (17.06.2004)

PCT

(10) International Publication Number WO 2004/050688 A1

- (51) International Patent Classification⁷: C07K 7/06, 7/08, A61K 38/04, A61P 9/00, 13/00, 25/00, 29/00
- (1) Asternational Application Number:

PCT/AU2003/001606

- (22) International Filing Date: 2 December 2003 (02.12.2003)
- (25) Ylling Language:

English

(26) Publication Language:

English

Α

- (30) Priority Data: 69/430,307 2 December 2002 (02.12.2002) US
- (71) Applicant (for all designated States except US): XENOME LTD [AU/AU]; 50 Meiers Road, Indooroopilly, Queensland 4068 (AU).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): LEWIS, Richard, James [AU/AU]; 20 Ross Street, Woolloongabba, Queensland 4102 (AU). ALEWOOD, Paul, Francis [AU/AU];

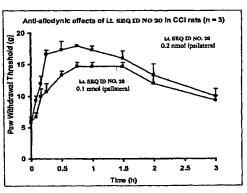
145 O'Brians Road, Pullenvale, Queensland 4069 (AU). ALEWOOD, Dianne [AU/AU]; 145 O'Brians Road, Pullenvale, Queensland 4069 (AU). PALANT, Elka [AU/AU]; 5 Kewarra Street, Kenmore, Queensland 4069 (AU).

- (74) Agents: CARROLL, John, Graham et al.; DAVIES COLLISON CAVE, 1 Nicholson Street, Melbourne, Victoria 3000 (AU).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

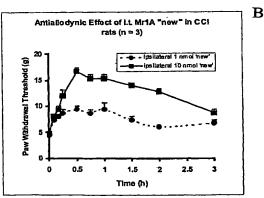
[Continued on next page]

(54) Title: NOVEL χ-CONOTOXIN PEPTIDES (-II)

Anti-allodynic effects of (A) i.t. SEQ ID NO 20 and (B)MrIA in Chronic Constriction Injury (CCI) of the rat sciatic nerve



(57) Abstract: An isolated, synthetic or recombinant χ -conotoxin peptide having the ability to inhibit neuronal amine transporter comprising the following sequence of amino acids: Cys Cys Gly Tyr Lys Leu Cys Xaa5 Xaa6 Cys, SEQ ID NO. 3, where Xaa5 and Xaa6 are independently absent or represent any amino acid residue except Cys; or a sequence in which Gly, Tyr, Lys or Leu are subject to conservative amino acid substitution or side chain modification; with the proviso that the peptide is not χ -MrIA, χ -MrIB, Mar2, CMrVIA, Bn1.5, Mr1.3 or Au1.4; or a salt, ester, amide, prodrug or cyclised derivative thereof.



European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- with international search report